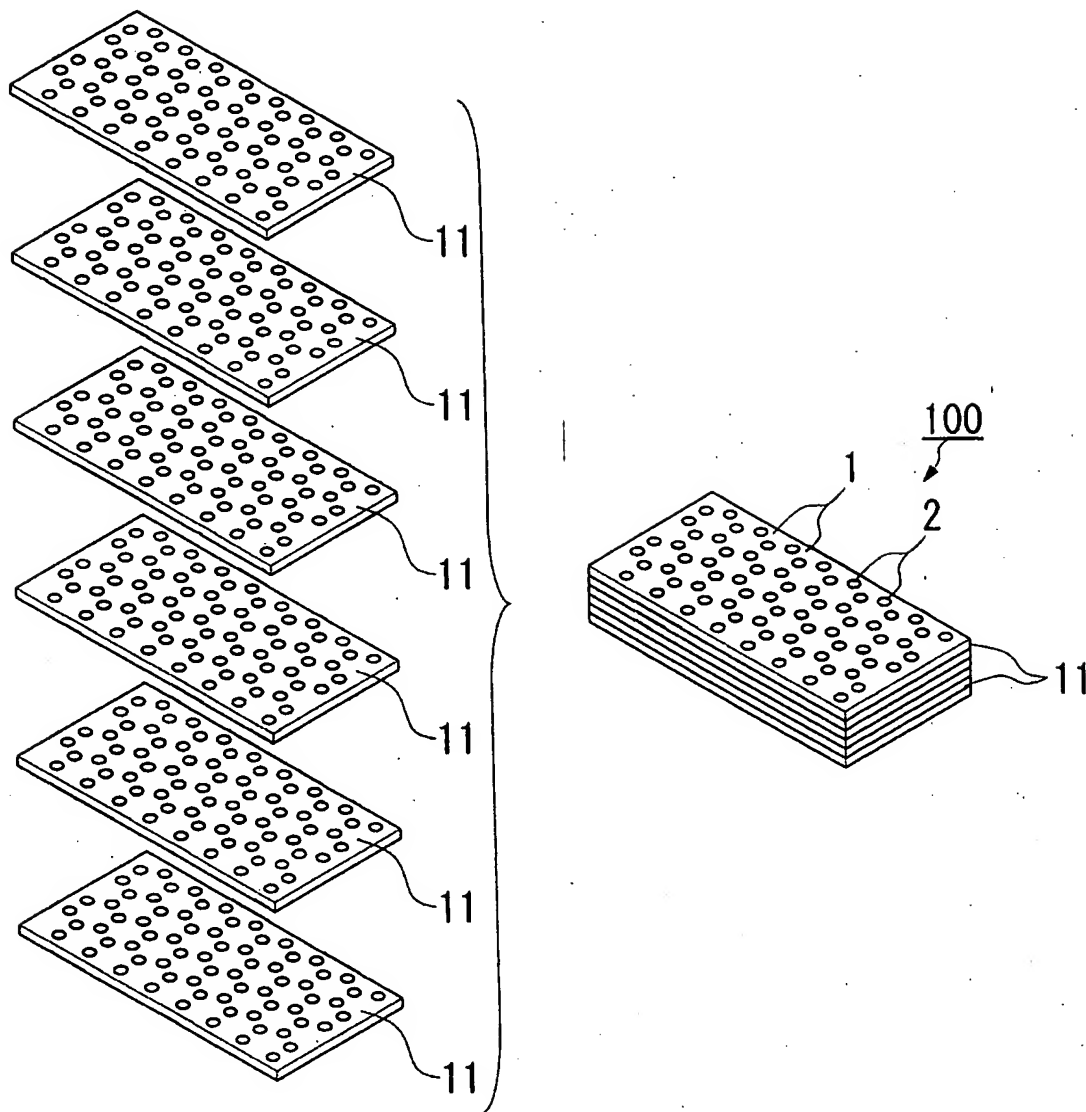


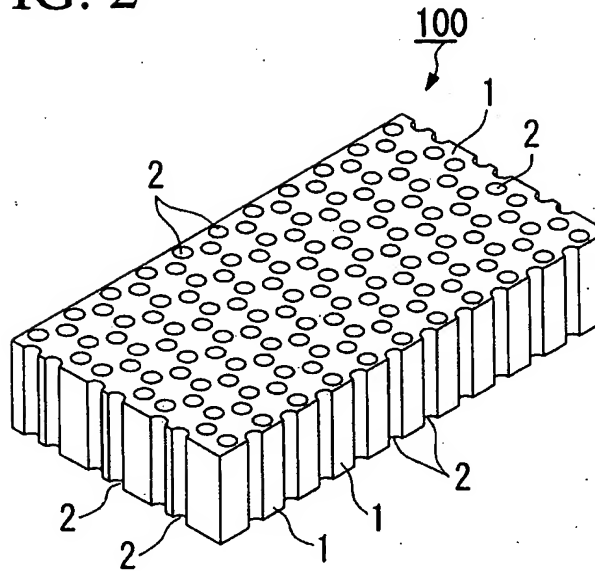
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FIG. 1



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FIG. 2



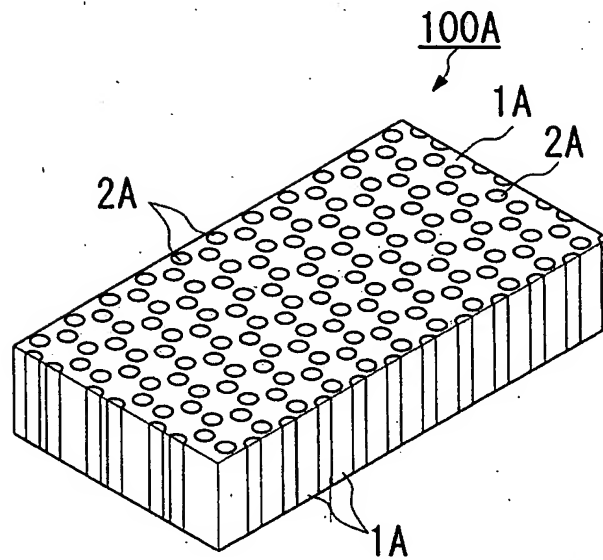
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FIG. 3

Dielectric ceramic	Relative Dielectric constant	Q·f (GHz)	τf (ppm/°C)
Al <sub>2</sub> O <sub>3</sub>	9.8	300000	-55
TiO <sub>2</sub>	104	45000	450
MgTiO <sub>3</sub>	17	110000	-45
CaTiO <sub>3</sub>	170	3600	800
SrTiO <sub>3</sub>	255	1400	1670
CaZrO <sub>3</sub>	28	1400	-20
BaZrO <sub>3</sub>	40	1400	150
MgTiO <sub>3</sub> -CaTiO <sub>3</sub>	21	45000	0
(Zr, Sn)TiO <sub>4</sub>	38	49000	0
BaTi <sub>4</sub> O <sub>9</sub>	38	36000	15
Ba <sub>2</sub> Ti <sub>3</sub> O <sub>20</sub>	40	36000	5
La <sub>2</sub> Ti <sub>2</sub> O <sub>7</sub>	44	1200	-85
Nd <sub>2</sub> Ti <sub>2</sub> O <sub>7</sub>	37	3300	-118
BaO-TiO <sub>2</sub> -rare earth	80-90	A few 1000	0
Ba(Mg <sub>1/3</sub> Nb <sub>2/3</sub> ) <sub>3</sub>	32	55000	33
Ba(Mg <sub>1/3</sub> Ta <sub>2/3</sub> ) <sub>3</sub>	25	350000	-4
Ba(Zn <sub>1/3</sub> Nb <sub>2/3</sub> ) <sub>3</sub>	41	87000	31
Ba(Zn <sub>1/3</sub> Ta <sub>2/3</sub> ) <sub>3</sub>	30	165000	0
CaTiO <sub>3</sub> -NdAlO <sub>3</sub>	43	47000	0-6
(Ba,Pb)Nd <sub>2</sub> Ti <sub>4</sub> O <sub>12</sub>	92	5000	0-6
(Ba,Pb)(Nd,Bi) <sub>2</sub> Ti <sub>4</sub> O <sub>12</sub>	110	2500	0-6

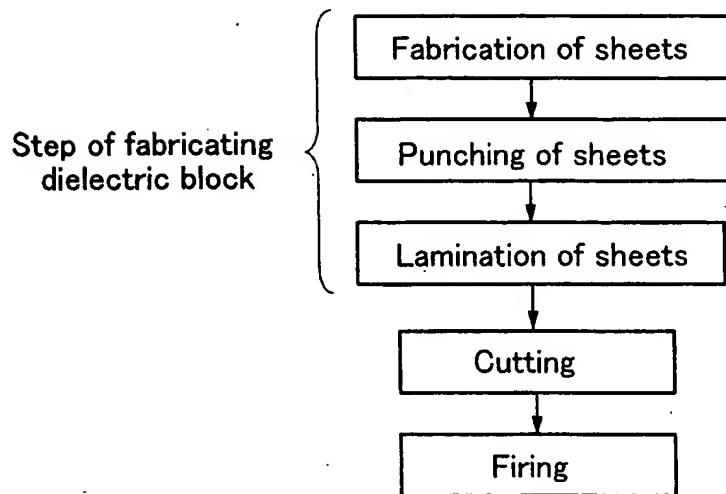
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FIG. 4



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FIG. 5



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FIG. 6A

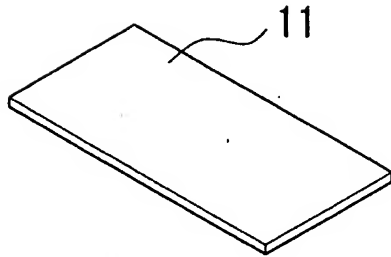


FIG. 6B

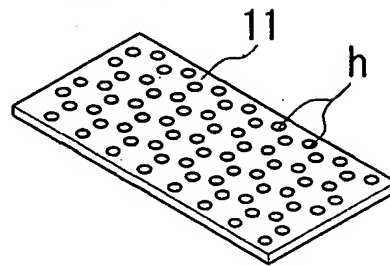


FIG. 6C

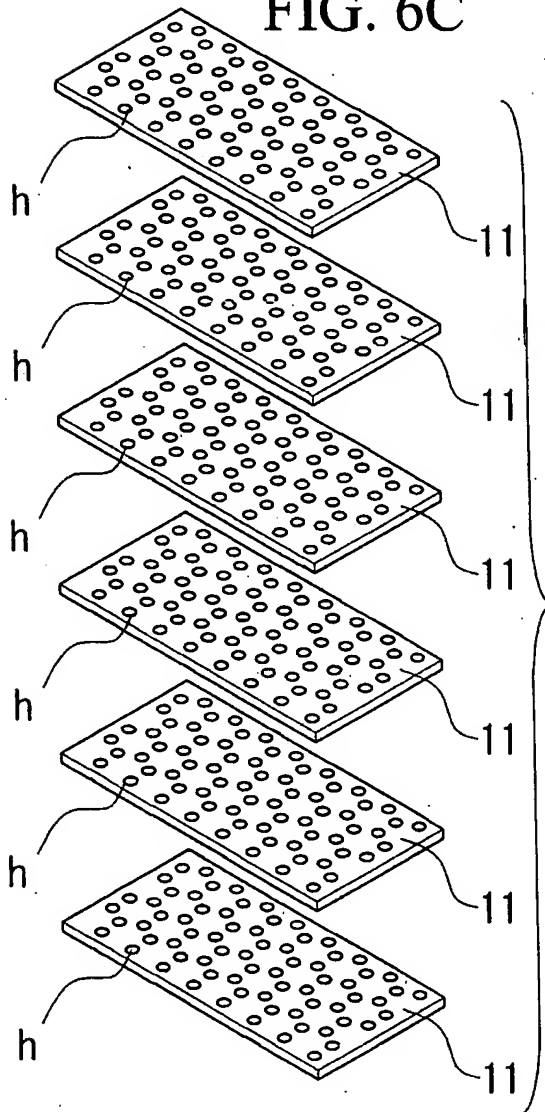
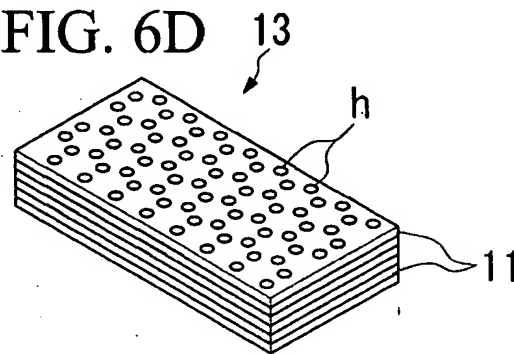
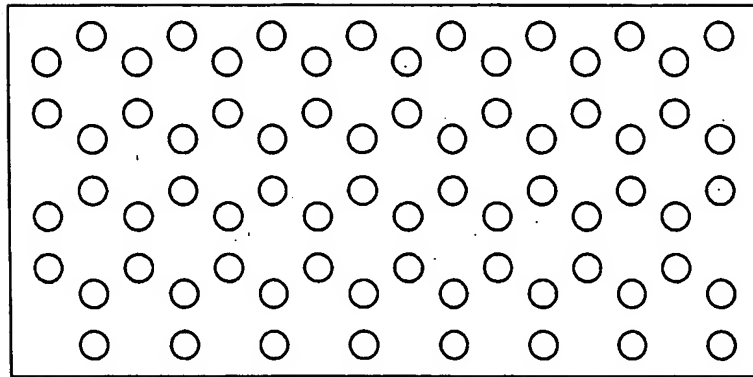


FIG. 6D



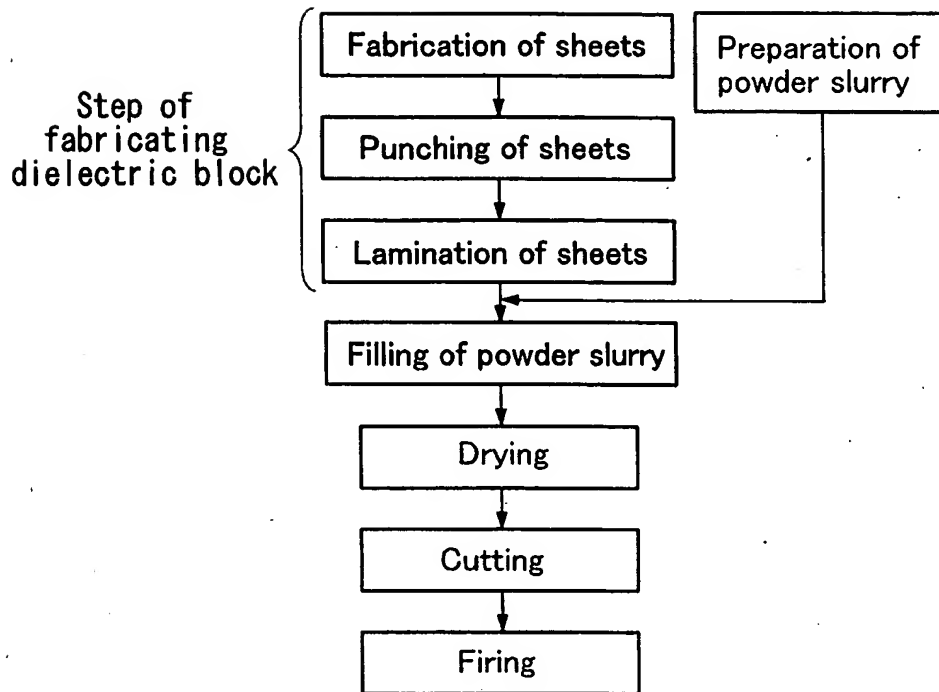
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FIG. 7



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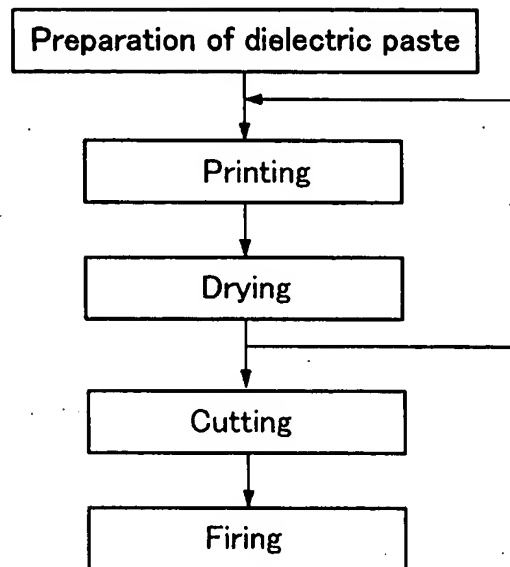
FIG. 8





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FIG. 9



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FIG. 10A

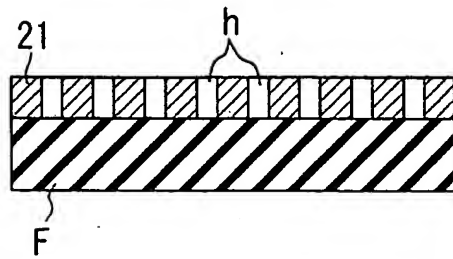


FIG. 10C

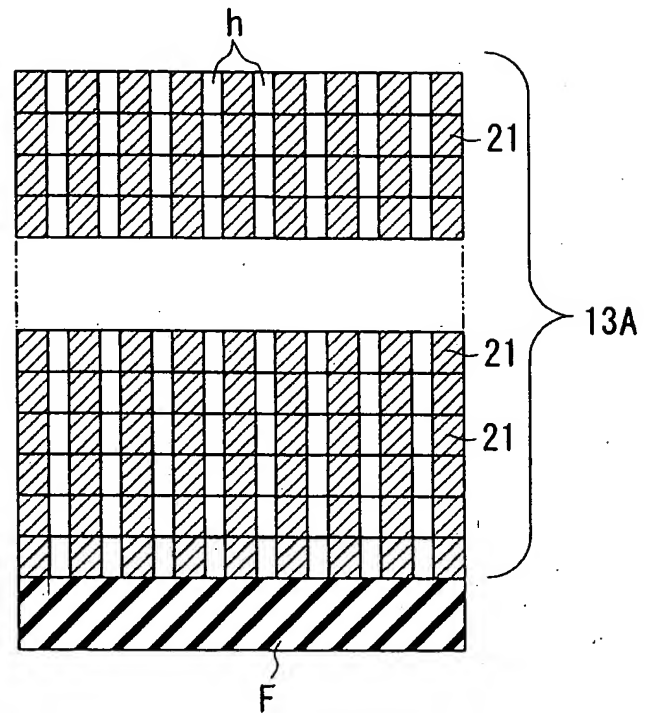


FIG. 10B

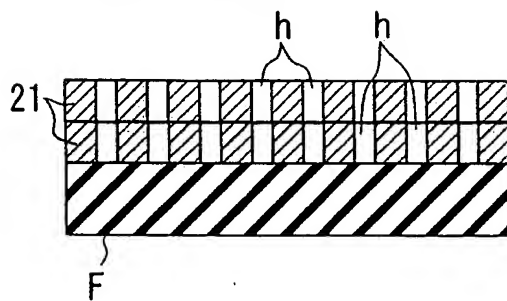
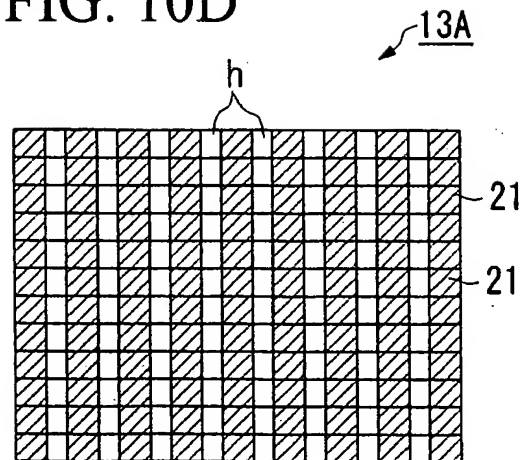
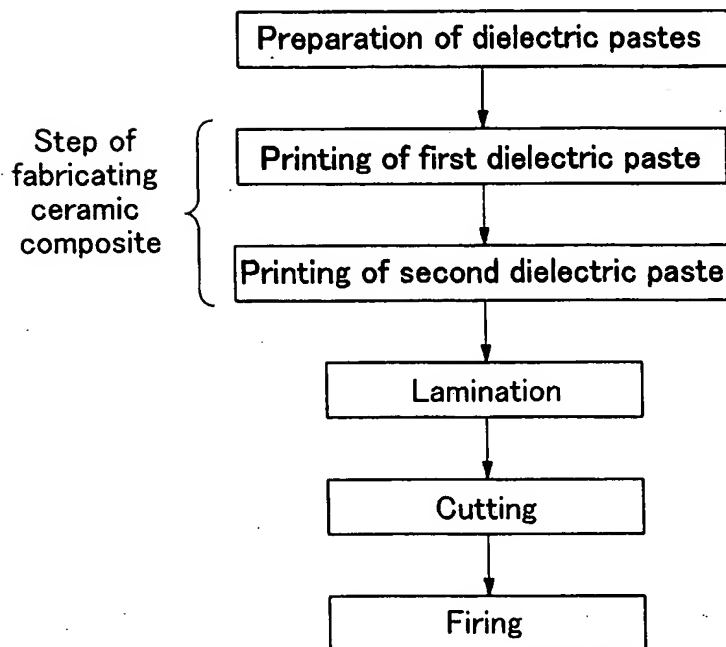


FIG. 10D



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FIG. 11



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FIG. 12A

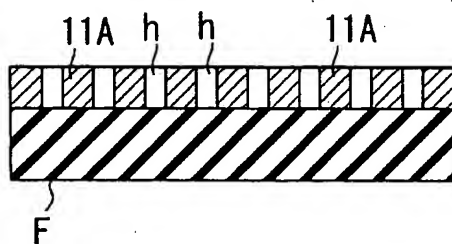
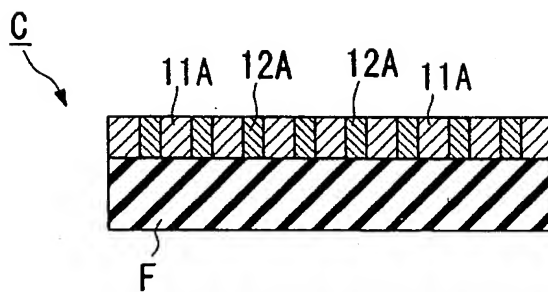


FIG. 12B



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FIG. 13A

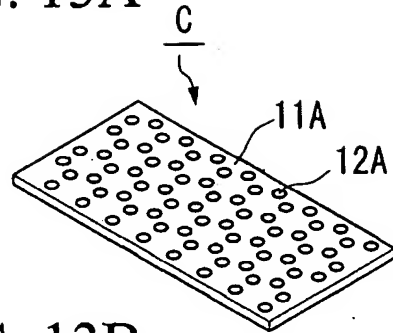


FIG. 13C

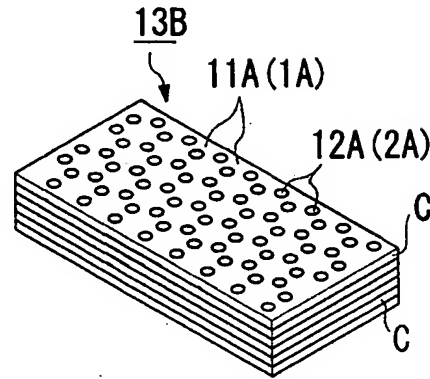
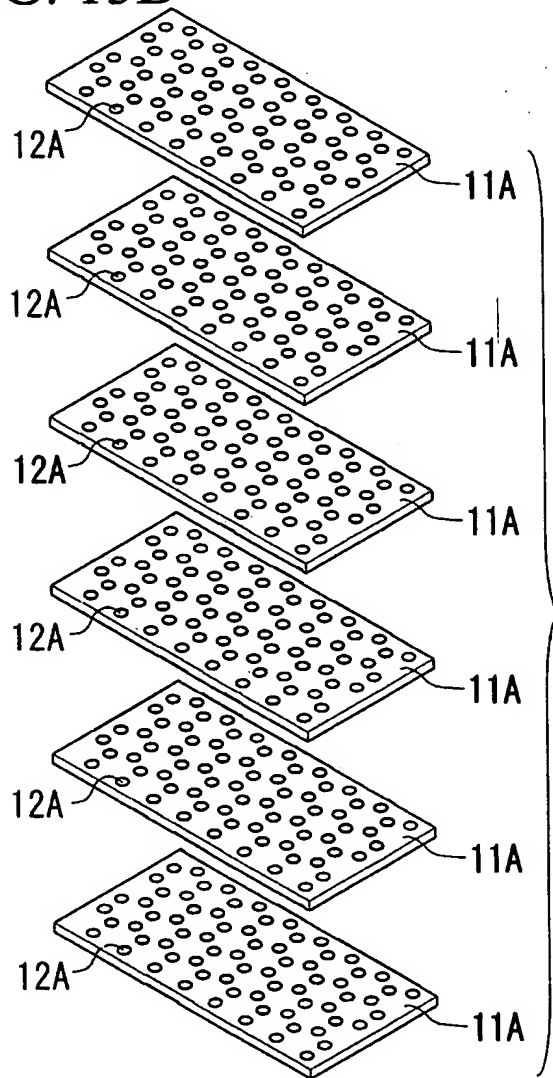
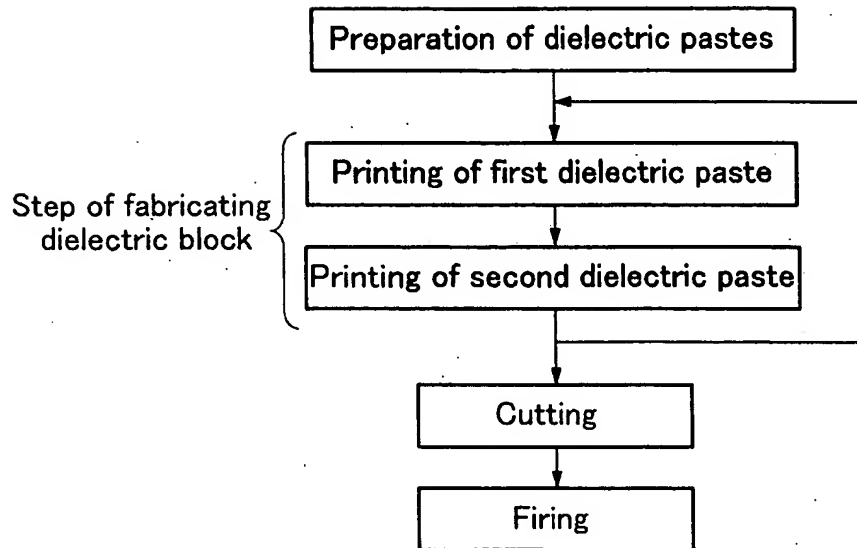


FIG. 13B



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FIG. 14



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FIG. 15A

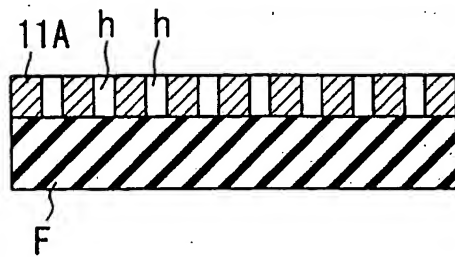


FIG. 15E

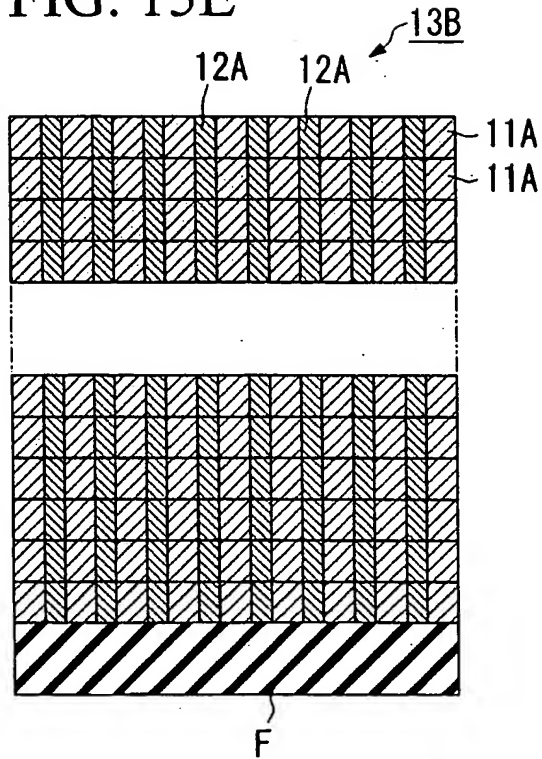


FIG. 15B

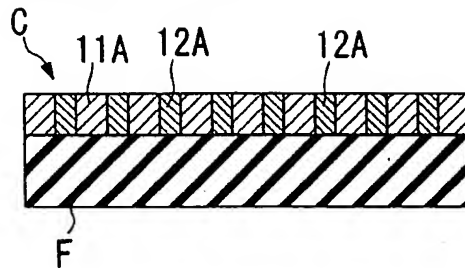


FIG. 15C

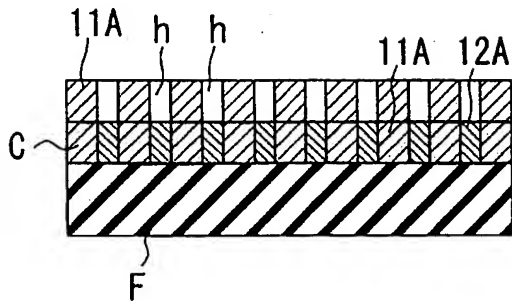


FIG. 15F

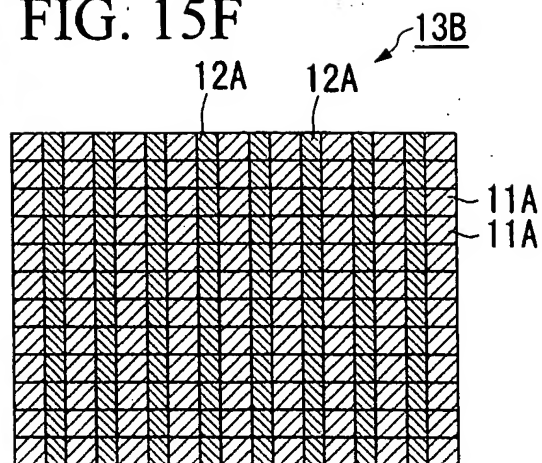
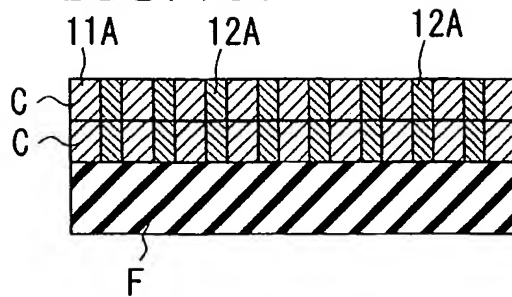
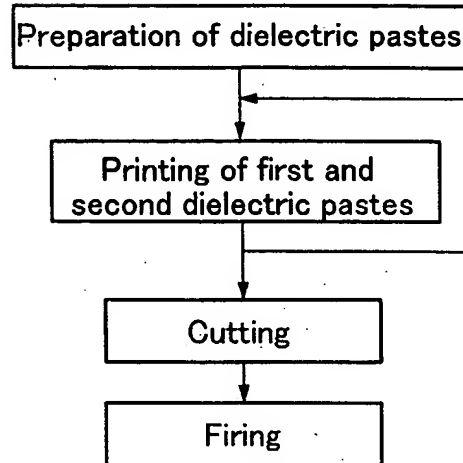


FIG. 15D



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FIG. 16





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FIG. 17A

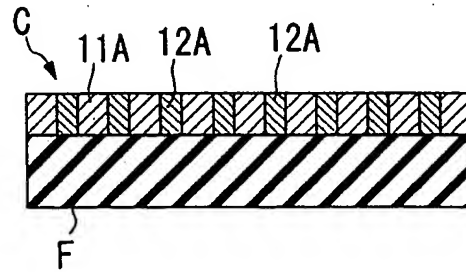


FIG. 17B

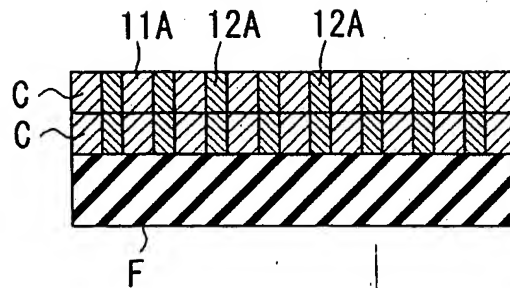
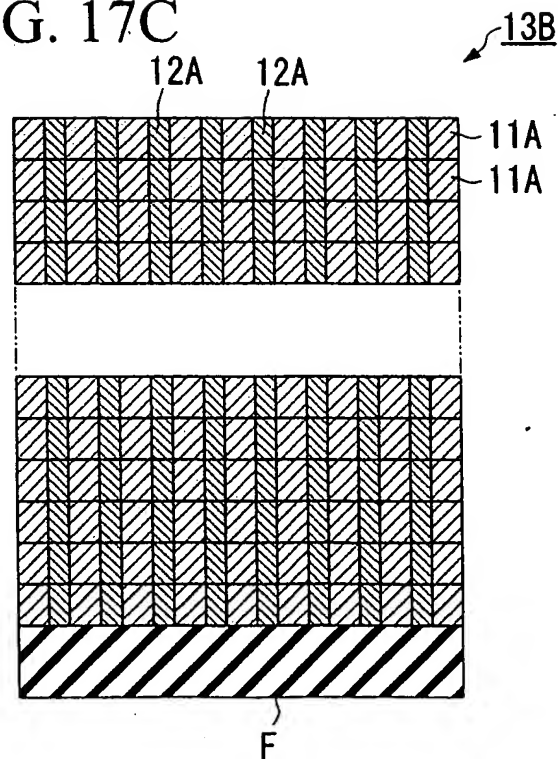


FIG. 17C



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FIG. 18A

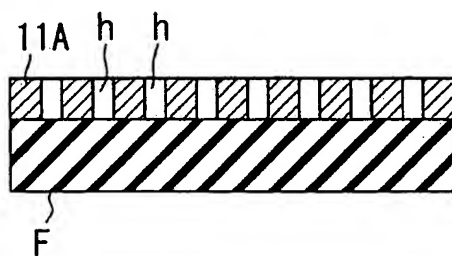


FIG. 18B

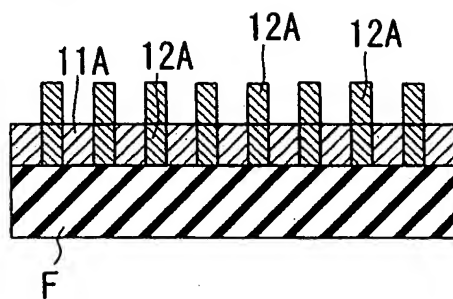
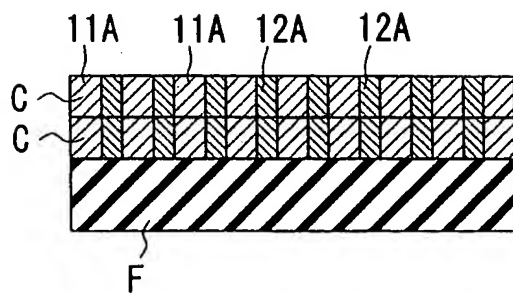
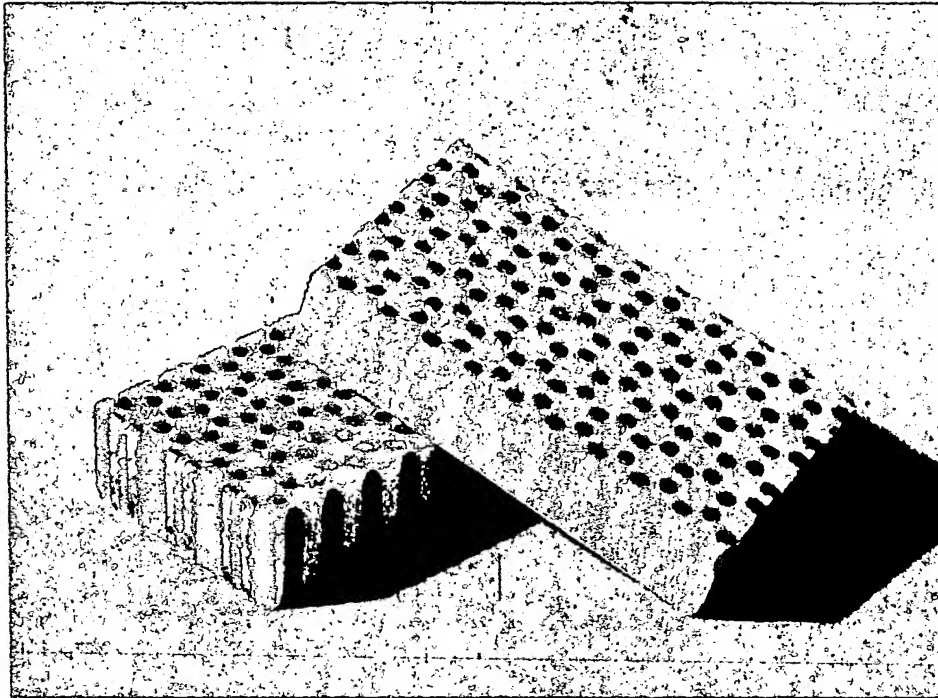


FIG. 18C



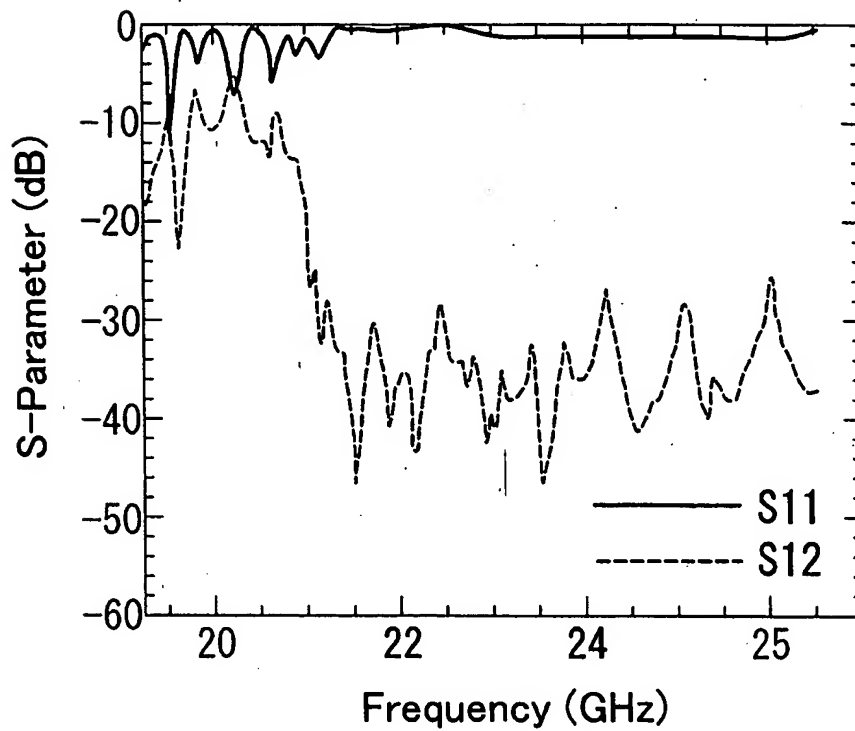
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FIG. 19



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FIG. 20



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FIG. 21

